

1 IN THE CLAIMS

2 Please amend the claims as follows. Claims are presented below with the appropriate
3 notation.

4

5 1. A method for reorganizing a database table online, the method steps comprising:

6 a) moving a subset of records within the database table;

7 b) flagging each moved record as a reorganization record;

8 c) creating a reorganization pointer record for each moved record at the initial
9 location of the moved record, the reorganization pointer record pointing to the new location of
10 the moved record; and

11 d) establishing scanner process constraints based on whether a scanner process is
12 commenced prior to or after the moving.

1 18. A method for reorganizing a database table the method comprising the steps of:

2 a) a vacate move step;

3 b) a vacate clean up step;

4 c) a fill move step; and

5 d) a fill clean up step wherein each clean up step is synchronised to commence at
6 the completion of a move step and to commence only when all queries launching scanner
7 processes commenced before the completion of a move step have completed and each move
8 step is synchronised to commence at the completion of a clean up step and to commence only
9 when all queries launching scanner processes after the completion of a previous move step
10 have completed.

1 30. (currently amended) A method for reorganizing a database table online, the method
2 comprising the following steps:

3 a) a vacate move step to move data records from move pages in the table to free
4 space in other pages of the database table; and

5 b) a fill move step to move data records into move pages in the table.

1 31. The method of claim 30 wherein each move step comprises the step of defining
2 temporary pointers from the original position of each moved record to the moved position of
3 the moved record.

1 32. The method of claim 31 further comprising the step of

2 c) defining selected scanners to be constrained to follow the temporary pointers
3 while accessing records so as to maintain data ordering for the selected scanners wherein the
4 move steps are synchronised with query processes launching scanners so as to maintain the
5 temporary pointers for use by said scanners launched by query processes.

1 33. The method of claim 32 in which the database table comprises overflow pointer
2 records and the original position of a moved record from which a temporary pointer points.

1 34. A computer readable medium containing program instructions for reorganizing a
2 database table online, the program instructions comprising the steps of:

3 a) moving a subset of records within the database table;

- 4 b) flagging each moved record in as a reorganization record;
- 5 c) creating a reorganization pointer record for each moved record in at the initial
- 6 location of the moved record, the reorganization pointer record pointing to the new location of
- 7 the moved record; and
- 8 d) establishing scanner process constraints based on whether a scanner process is
- 9 commenced prior to or after the moving.

1 38. A computer readable medium containing program instructions for reorganizing a
2 database table online, the program instructions comprising the steps of:

- 3 a) a vacate move step;
- 4 b) a vacate clean up step;
- 5 c) a fill move step; and
- 6 d) a fill clean up step wherein each clean up step is synchronised to commence at
- 7 the completion of a move step and to commence only when all queries launching scanner
- 8 processes commenced before the completion of a move step have completed and each move
- 9 step is synchronised to commence at the completion of a clean up step and to commence only
- 10 when all queries launching scanner processes after the completion of a previous move step
- 11 have completed.

1 44. (currently amended) A computer readable medium including program instructions
2 implementing steps for reorganizing a database table online, the [method] steps comprising
3 [the following steps]:

4 a) a vacate move step to move data records from move pages in the table to free
5 space in other pages of the database table; and
6 b) a fill move step to move data records into move pages in the table.

1 45. The computer readable medium of claim 44 wherein each move step comprises the
2 step of defining temporary pointers from the original position of each moved record to the
3 moved position of the moved record.

1 46. The computer readable medium of claim 45 further comprising the step of
2 c) defining selected scanners to be constrained to follow the temporary pointers
3 while accessing records so as to maintain data ordering for the selected scanners wherein the
4 move steps are synchronised with query processes launching scanners so as to maintain the
5 temporary pointers for use by said scanners launched by query processes.

1 47. A computer system for reorganizing a database table online, the computer system
2 comprising
3 means for moving a subset of records within the database table;
4 means for flagging each record moved by the means for moving a subset of records as
5 a reorganization record;
6 means for creating a reorganization pointer record for each record moved by the

7 means for moving a subset of records at the initial location of the moved record, the
8 reorganization pointer record pointing to the new location of the moved record; and
9 means for establishing scanner process constraints based on whether a scanner process
10 is commenced prior to or after moving the subset of records.

1 51. A computer system for reorganizing a database table comprising:
2 means for performing a vacate move step;
3 means for performing a vacate clean up step;
4 means for performing a fill move step; and
5 means for performing a fill clean up step wherein each clean up step is synchronised to
6 commence at the completion of a move step and to commence only when all queries
7 launching scanner processes commenced before the completion of a move step have
8 completed and each move step is synchronised to commence at the completion of a clean up
9 step and to commence only when all queries launching scanner processes after the completion
10 of a previous move step have completed.

1 57. (currently amended) A computer system for reorganizing a database table online, the
2 computer system comprising:
3 a) means for carrying out a vacate move step to move data records from move
4 pages in the table to free space in other pages of the database table; and
5 b) means for carrying out a fill move step to move data records into the move
6 pages in the table.

1 58. The computer system of claim 57 further comprising:

2 means for defining temporary pointers from an original position of each moved record

3 to the moved position of the moved record;

4 means for defining selected scanners to be constrained to follow the temporary

5 pointers while accessing records so as to maintain data ordering for the selected scanners; and

6 means for synchronising the move steps with query processes launching scanners so as

7 to maintain the temporary pointers for use by said scanners launched by query processes.

59. The computer system of claim 58 in which the database table comprises overflow pointer records and the computer system further comprises means for setting the original position of a moved record to be the position of an overflow pointer record, from which a temporary pointer points, where the moved data record is originally pointed to by said overflow pointer record.